

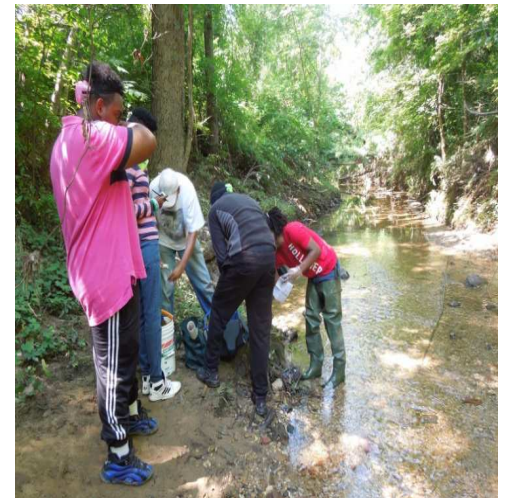
The Urban Ecology Engagement Initiative:

A project to involve students in studying
and restoring the Anacostia Watershed

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Maryland Streams Roundtable

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Project Overview

- Engage the students who live in the watershed in improving the watershed
 - Collaboration of science, community engagement, and



Project Activities

- Stream monitoring
- Independent research projects
- Field trips
- Interaction with STEM professionals
- Sharing results with community groups as watershed



Urban Ecology Engagement Initiative

- Improved scientific, environmental, and geo-literacy of students
- Students view themselves as part of the environment
- Exposure to a wide variety of water-related careers
- Students become advocates for the Anacostia Watershed and environmental change
- Students feel empowered to address environmental issues within their communities



Urban Ecology Engagement Initiative

- To involve the students who live in the Anacostia Watershed in studying, understanding, and improving the watershed
- Include 4 schools in Maryland's Prince George's County, Montgomery County and some DC schools
 - Classroom visits
 - Teachers as Smithsonian Professional Development Interns



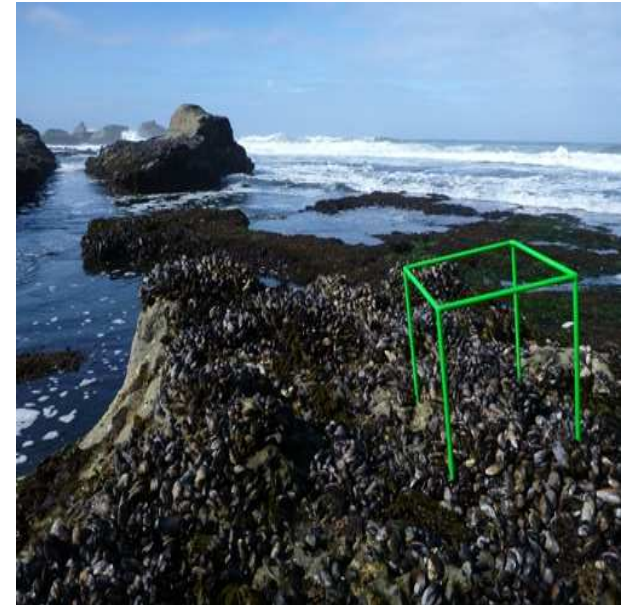
Urban Ecology Engagement Initiative

- Standardized procedures used by all groups
- Teachers trained to collect macro-invertebrates
- Student-collected data submitted to the Maryland stream monitoring program

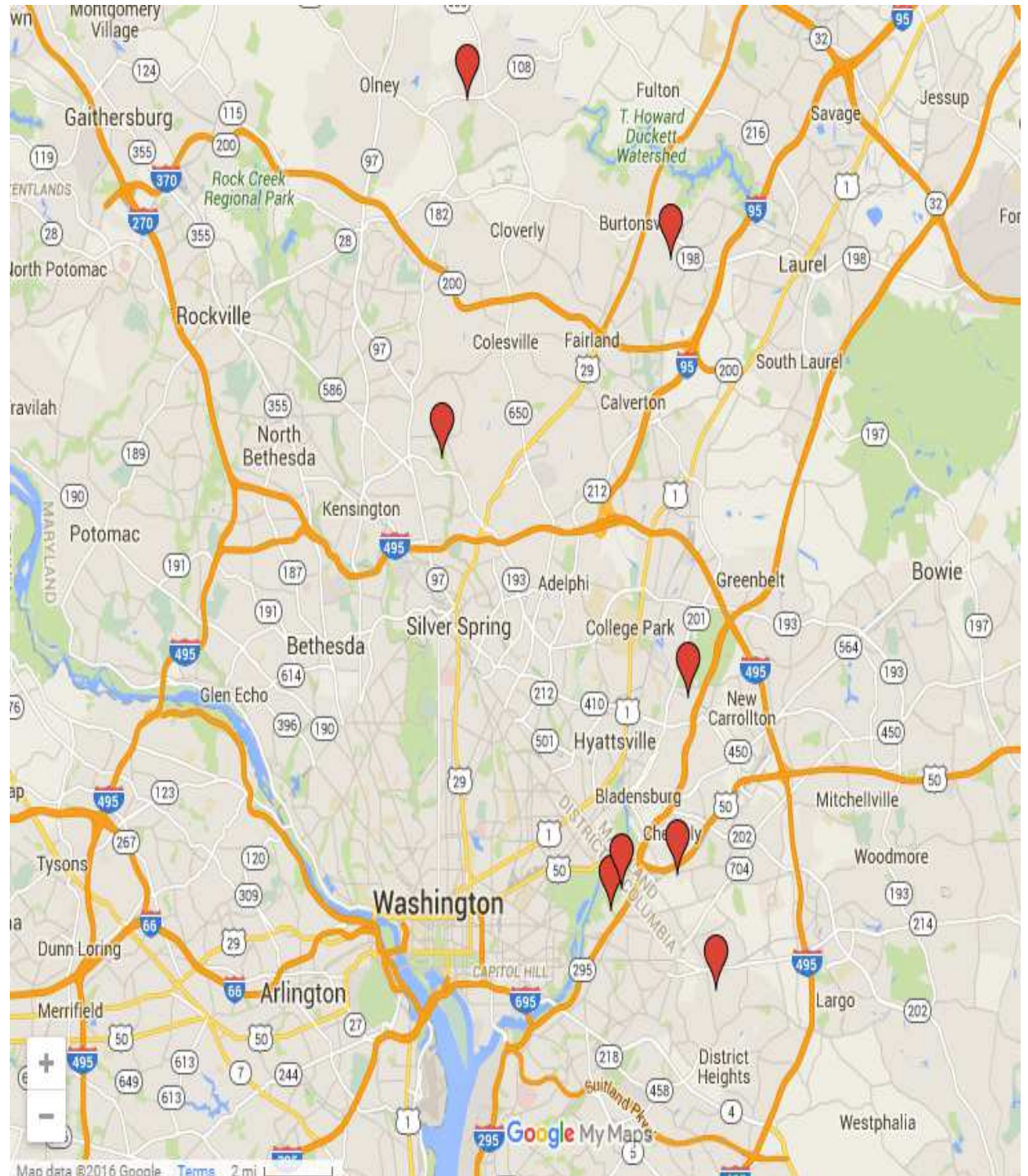


Urban Ecology Engagement Initiative

- BioCubes
- Q?rius and NMNH
- 1 cubic foot
- Can be placed anywhere
- Teaching tool—focus on distributions, interactions, and relationship
- Hundreds of species per cubic foot



- Cabin Branch
- Lower Beaverdam
- Brier Ditch
- Saddle Creek
- Sandy Spring Headwaters
- Sligo Creek



Urban Ecology Engagement Initiative

– This Year

- Will continue working with teachers and students to collect data
- Data loggers to constantly record environmental data
- Data will be added to National Geographic FieldScope project
- Project website will combine data from all sites-WIP
- Add water height and dissolved oxygen measures



Urban Ecology Engagement Initiative

– Longer-Term

- Students participate in a variety of SERC research projects
 - Creating a knowledgeable, dependable group of students and teachers to assist with data collection
 - Independent research projects
 - Focused on P.O.W.E.R. students
 - Opportunities for science and humanities projects



Urban Ecology Engagement Initiative—So What?

- Improved science education and geo-literacy
- Empowering students
- Creating a knowledgeable, dependable group of students and teachers to assist with data collection
- Real data

